



2000 APPLICATION FOR RECLAMATION PERMIT
FORM SM-8A

Check appropriate box(es): ☐ new permit ☒ revision of existing permit ☐ transfer of permit ☐ expansion

NOTE: Do not attempt to complete this form until you have carefully read the accompanying instruction document (SM8AINST.PDF). Do not attempt to use this form as an MS Word Template unless you are familiar with the use of templates in MS Word.

1. NAME OF APPLICANT/PERMIT HOLDER(S) J. Arlie Bryant Inc. 2000 W 6 th Street The Dalles, OR 97058			12. Are all of these mines now in compliance with RCW 78.44, WAC 332-18, and conditions of the permits? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no																																
2. MAILING ADDRESS SAME			13. Have you ever had a surface mine operating or reclamation permit revoked? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Have you ever had a reclamation security forfeited? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no If you answered yes to either of the above, list the permit number(s):																																
3. Telephone 541 296-2129 UBI No. 600 071 818			14. Type of proposed or existing mine: Material(s) to be mined: <input type="checkbox"/> sand and gravel <input type="checkbox"/> rock or stone <input type="checkbox"/> clay <input type="checkbox"/> metal <input type="checkbox"/> limestone <input type="checkbox"/> silica <input type="checkbox"/> other _____ Deposit type: <input type="checkbox"/> glacial <input type="checkbox"/> river floodplain (alluvial) <input type="checkbox"/> river channel deposits <input type="checkbox"/> talus <input checked="" type="checkbox"/> bedrock <input type="checkbox"/> lode <input type="checkbox"/> unknown <input type="checkbox"/> other _____																																
4. NAME OF MINE Fisher Quarry			15. Total Acreage and Depth of Permit Area: (Include all acreage to be disturbed by mining, setbacks, buffers, and associated activities during the life of the mine.) (See Form SM-6.) Total area disturbed will be 20 acres. Area to be disturbed in next 36 months will be 6 acres. Maximum vertical depth below pre-mining topographic grade is 240 feet. Maximum depth of excavated mine floor is 1900 feet relative to mean sea level																																
5. Street address and milepost of surface mine Site located adjacent to Trout Lake Glenwood Road- Approximately 3/4 mile east from intersection of Latimer Rd and Trout Lake Glenwood Road			16. Expected start date of mining Operating																																
6. Distance (miles) 4			17. Estimated number of years 30																																
7. Direction from SE			18. Total quantity to be mined over life of mine (estimated): 400000 <input type="checkbox"/> tons, or <input checked="" type="checkbox"/> cu yds																																
8. Nearest community Trout Lake			19. Estimated annual production: 30000 <input type="checkbox"/> tons, or <input checked="" type="checkbox"/> cu yds																																
9. COUNTY Klickitat No attachments will be accepted. Legal Description of permit area: <table border="1"><thead><tr><th>1/4</th><th>1/4</th><th>Section</th><th>Township</th><th>Range</th></tr></thead><tbody><tr><td>NE</td><td>SW</td><td>29</td><td>6N</td><td>11E</td></tr><tr><td>SE</td><td>NE</td><td>29</td><td>6N</td><td>11E</td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>						1/4	1/4	Section	Township	Range	NE	SW	29	6N	11E	SE	NE	29	6N	11E															
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SE	NE	29	6N	11E																															
10. TOTAL ACREAGE OF PERMIT AREA APPLIED FOR (include all acreage to be disturbed by mining, setbacks, buffers, and associated activities during the life of the mine.) 20 acres																																			
11. Do you or any person, partnership, or corporation associated with you now hold, or have you held, a surface mining operating or reclamation permit? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If you answered yes to the above, please list: <table border="1"><thead><tr><th>Permit Number</th><th>Active Operation?</th><th>Reclamation current/complete?</th></tr><tr><th></th><th>Yes</th><th>No</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>70-010778</td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> </td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> </td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> </td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></tbody></table>						Permit Number	Active Operation?	Reclamation current/complete?		Yes	No	Yes	No	70-010778	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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20. Subsequent land use: <input type="checkbox"/> industrial <input type="checkbox"/> commercial <input type="checkbox"/> residential <input type="checkbox"/> agricultural <input checked="" type="checkbox"/> forestry <input type="checkbox"/> wetlands and lakes <input type="checkbox"/> Other _____ Reclaimed elevation of floor of mine: 1900 feet relative to mean sea level Reclaimed elevation is shown on cross sections? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Subsequent land use is compatible with County or Municipal comprehensive plan? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no County or Municipality Approval for Surface Mining (Form SM-6) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no SEPA Checklist required? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If any answers are no, explain: <u>Form SM 6 has already been submitted</u>																																			
21. Application fee for a new reclamation permit is herewith attached? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no																																			

CHECKLIST OF RECLAMATION STANDARDS

Permit area has been divided into segments for mining and a mining schedule has been developed? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Permit area has been divided into segments for reclamation and a reclamation schedule has been developed? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
23A. Permit and Disturbed Area Boundaries	
Boundary of the permit area has been marked on the ground with permanent boundary markers? Explain boundary markers: Permit boundary markers are steel fence posts driven into the ground at points marked on the map.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
23B. Saving Topsoil, Subsoil, and Overburden for Reclamation	
Thickness of topsoil is <u>0.1</u> feet Thickness of subsoil is <u>0.4</u> feet Depth to bedrock is <u>0.5</u> feet Total volume of topsoil is <u>3000</u> cubic yards Total volume of subsoil is <u>12000</u> cubic yards Volume of stored topsoil/subsoil is <u>15000</u> cubic yards and will require <u>0.25</u> acres for storage.	
Storage areas are shown on maps and have been marked on the ground with permanent boundary markers? Topsoil will be salvaged? If no, explain: The topsoil layer is very thin but will be salvaged to the degree possible with heavy equipment.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil and overburden will be moved to reclaim an adjacent depleted segment? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Before materials are moved, vegetation will be cleared and drainage planned for soil storage areas? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Soil storage areas will be stabilized with vegetation to prevent erosion if materials will be stored for more than one season? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
23C. Setbacks and Screens	
Maximum depth of the mine will be <u>240</u> feet from <u>2140</u> feet (<i>highest</i>) to <u>1900</u> feet (<i>lowest</i>) elevation relative to mean sea level.. The setback for this site will be <u>70</u> feet wide.	
Is a permanent, undisturbed buffer planned for this site? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Setbacks are shown on maps and have been marked on the ground with permanent boundary markers? If no, explain: Marked on map but not at site at this time.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no

CHECKLIST OF RECLAMATION STANDARDS

Does this site have a backfilling plan that addresses the protection of adjacent property and how the final, stable slopes are to be achieved? If no, explain: Backfilling will not be completed for this site.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
23D. Buffers to Protect Streams and Flood Plains	
If yes, see "Additional Information Requirements for Flood Plain Mines." This document is included in the SM8AINST.PDF file.	
A stream buffer of at least 200 feet has been marked on the ground with permanent boundary markers?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A buffer of at least 200 feet from the 100-year flood plain has been marked on the ground with permanent boundary markers? If no, explain: N/A	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Copy of Shoreline Permit from local government or the Dept of Ecology is attached?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Hydraulic Project Approval from the Department of Fish and Wildlife is attached?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
23E. Conservation Buffers	
Conservation buffers will be established for the following purpose(s): (Check all that apply) <input type="checkbox"/> unstable slopes <input type="checkbox"/> wildlife habitat <input type="checkbox"/> water quality <input type="checkbox"/> other _____	
Describe the nature and configuration of the conservation buffer(s):	
Conservation setbacks are shown on maps and have been marked on the ground with permanent boundary markers?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
23F. Ground Water	
High water table depth is <u>>80</u> feet <input type="checkbox"/> relative to mean sea level, <input checked="" type="checkbox"/> below original surface, or <input type="checkbox"/> unknown.	
Low water table depth is <u>>80</u> feet <input type="checkbox"/> relative to mean sea level, <input checked="" type="checkbox"/> below original surface, or <input type="checkbox"/> unknown.	
Annual fluctuation of water table is from <u>Unknown</u> feet on _____ to _____ feet on _____.	
Direction of ground water flow: <u>South</u>	
Are well logs attached?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Is the aquifer perched?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Is the shallowest aquifer: <input checked="" type="checkbox"/> confined <input type="checkbox"/> unconfined	
The site will be mined: <input type="checkbox"/> wet <input checked="" type="checkbox"/> dry <input type="checkbox"/> both	
Describe mining method:	
The site is in a: <input type="checkbox"/> critical aquifer recharge area <input type="checkbox"/> sole source aquifer <input type="checkbox"/> public water supply watershed <input type="checkbox"/> wellhead protection area <input type="checkbox"/> special protection area <input type="checkbox"/> designated aquifer protection area	
Ground water study attached? If yes, see "Additional Information Requirements for Hydrologically Sensitive Areas." This document is included in the SM8AINST.PDF file. If no, explain: Not applicable	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
23G. Archeology	
Are archeological/cultural resource sites present? If yes, describe how you will protect these resources:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no

CHECKLIST OF RECLAMATION STANDARDS

24. MINING PRACTICES TO FACILITATE RECLAMATION

24A. Soil Replacement

Topsoil will be saved?

If no, explain:

☒ yes ☐ no

Up to 4 feet of topsoil and (or) subsoil will be restored?

If no, explain: **The current site conditions support growth with a minimal topsoil horizon. Select areas will be identified at the site (low areas or swales) to place the topsoil to enhance revegetation. Coconut mats will be used to stabilize the topsoil in these areas.**

☐ yes ☒ no

Topsoil will be restored and seedbeds prepared as necessary to promote effective revegetation and to stabilize slopes and mine floor?

If "yes" give details, if "no", explain: **Topsoil (1 to 2 feet of rock material covered with 1 foot of topsoil) will be placed at discrete locations on cliff benches to serve as stable rooting medium. Planting areas will be prepared by creating depressions, small pits, and surface irregularities at the base of the highwalls, base of chutes, and at the top of the scree slopes. It is anticipated that minimal topsoil will be placed on the mine floor.**

☒ yes ☐ no

Subsoil will be replaced to an approximate depth of 0.4 feet on the pit floor and a depth of 0.5 feet on slopes.

Topsoil will be replaced to an approximate depth of 0.4 feet on the pit floor and a depth of 1 feet on slopes.

Topsoil will be distributed evenly over the site?

If no, explain: **Select areas will be identified that have less potential of erosion for placing topsoil**

☐ yes ☒ no

If topsoil is in short supply, it will be strategically placed in depressions and low areas in adequate thickness to conserve moisture and promote revegetation?

If no, explain:

☒ yes ☐ no

Topsoil will be moved when conditions are not overly wet or dry?

If no, explain:

☒ yes ☐ no

Topsoil will be imported?

If yes, describe source. If no, explain: **Topsoil will be used in select areas and sufficient material should be available for this limited use.**

☐ yes ☒ no

Synthetic topsoil made from compost, biosolids, or other amendments will be used and (or) made on site to supplement existing topsoil?

If yes, explain:

☐ yes ☒ no

Materials such as till, loess, and (or) silt are available on site that could be used to supplement topsoil for reclamation.

If yes, explain:

☐ yes ☒ no

CHECKLIST OF RECLAMATION STANDARDS

Silt from settling ponds or a filter press will be used for reclamation? If yes, explain:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Settling pond clay slurries will be pumped or hauled to other segments for reclamation? If yes, explain:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Topsoil will be replaced with equipment that will minimize compaction, or it will be plowed, disked, or ripped following placement? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil will be immediately stabilized with grasses and legumes to prevent loss by erosion, slumping, or crusting? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil stockpile areas are shown on maps and will be marked on the ground with permanent boundary markers to protect from loss? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Segmental topsoil removal and replacement is shown on maps? If no, explain: The topsoil will be replaced as areas or segments are abandoned.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Topsoil salvage and replacement plan included? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
24B. Removal of Vegetation	
Vegetation will be removed sequentially from areas to be mined to prevent unnecessary erosion? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Small trees and other transplantable vegetation will be salvaged for use in revegetating other segments? If yes, give details. If no, explain: The extraction of resources are at a slow pace based upon demand within the area. Therefore, periods between reclamation and removal would be too long for preserving salvaged vegetation.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Wood and other organic debris will be: <input type="checkbox"/> recycled <input type="checkbox"/> removed from site <input type="checkbox"/> chipped <input type="checkbox"/> burned <input type="checkbox"/> buried <input type="checkbox"/> used to synthesize topsoil or mulch <input checked="" type="checkbox"/> other (explain) Root wads and woody debris may be used to shade seedlings. Solid waste disposal, burning, and land use permits are attached?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Some coarse wood (logs, stumps) and other large debris will be salvaged for fish and wildlife habitats? If yes, give details. If no, explain: Trees will be logged for lumber if practical. Unused logs or stumps will be made available to agencies or private organizations.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

CHECKLIST OF RECLAMATION STANDARDS

24C. Erosion control for Reclamation	
Pit floor will slope at gentle angles toward highwall, sediment retention pond, or proper drainage? If yes, give details. If no, explain: The pit floor and benches will be sloped toward highwalls to minimize runoff and to add soil moisture to the revegetated areas.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Revegetation, sheeting, and (or) matting will be used to protect areas susceptible to erosion? If yes, give details. If no, explain: Coconut mats will be used to stabilize topsoil areas that can not be sloped to prevent erosion.	<input type="checkbox"/> yes <input type="checkbox"/> no
Water control systems used for erosion control during segmental reclamation will: Divert clean water around pit? Trap sediment-laden runoff before it enters a stream? Result in essentially natural conditions of volume, velocity, and turbidity? Handle a 25-year, 24-hour peak event? <i>(Have you attached calculation?)</i> Be removed or reclaimed? If any answers are no, explain:	<div style="display: flex; flex-direction: column; gap: 5px;"> <div><input checked="" type="checkbox"/> yes <input type="checkbox"/> no</div> <div><input checked="" type="checkbox"/> yes <input type="checkbox"/> no</div> <div><input checked="" type="checkbox"/> yes <input type="checkbox"/> no</div> <div><input checked="" type="checkbox"/> yes <input type="checkbox"/> no</div> <div><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</div> <div><input checked="" type="checkbox"/> yes <input type="checkbox"/> no</div> </div>
Will any water control systems be removed upon final reclamation? If yes, explain: Water control systems are not planned for the site.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Water control measure will be established to prevent erosion of setbacks and neighboring properties? If yes, give details. If no, explain: The site will be sloped to prevent runoff from the site.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Storm-water conveyance ditches and channels will be lined with vegetation or riprap? If yes, give details. If no, explain: If storm water conveyance systems are required, they will be lined with riprap.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Natural and other drainage channels will be kept free of equipment, wastes, stockpiles, and overburden? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

25. RECLAMATION TOPOGRAPHY	
25A. Final Slopes	
Final slopes will be created using the cut-and-fill method? Explain procedure to be used: Benches will be created during mining. Reclamation mining will be to create slopes by blasting high walls. This process will completed cover benches in some area and partially in others.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

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Slopes will be created by mining to the final slope using the cut method? Explain procedure to be used: Blasting will be used to create sinuous slopes with rounded corners, multiple chutes and buttresses	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will vary in steepness? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will have a sinuous appearance in both profile and plan view? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Large rectilinear (that is, right angle, or straight, planar) areas will be eliminated? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Where reasonable, tracks of the final equipment pass will be preserved and oriented to trap moisture, soil, and seeds, and to inhibit erosion? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
25B. Slope Requirements for Pits and Overburden/Waste Rock Dumps (non-saleable products)	
<i>If the mine is a quarry or in hard rock, skip to Quarry section(25C).</i>	
Slopes will vary between 2 and 3 feet horizontal to 1 foot vertical or flatter, except in limited areas where steeper slopes are necessary to create sinuous topography and control drainage? If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no
For pits, slopes will not exceed 2 feet horizontal to 1 foot vertical except as necessary to blend with adjacent natural slopes? Give details:	<input type="checkbox"/> yes <input type="checkbox"/> no
Slope stability analysis required? If yes, see "Additional Information Requirements for Mines with Potentially Unstable or Steep Slopes." This document is included in the SM8AINST.PDF file. Slope stability analysis provided by _____	<input type="checkbox"/> yes <input type="checkbox"/> no
25C. Slope Requirements for Quarries and Hardrock Metal Mines	
<i>If mine is a pit in unconsolidated materials covered by Section 25B, go to Section 25D</i>	
Check the appropriate box(es) <input type="checkbox"/> Slopes will not exceed 2 feet horizontal to 1 foot vertical. <input type="checkbox"/> Slopes steeper than 1 foot horizontal to 1 foot vertical are an acceptable subsequent land use as confirmed on Form SM-6. <input type="checkbox"/> Hazardous slopes or cliffs are indigenous to the immediate area and already present a potential threat to human life. Photo and maps attached to document presence of cliffs. <input checked="" type="checkbox"/> Geologic or topographic characteristics of the site preclude slopes being reclaimed at a flatter angle and are an acceptable subsequent land use as confirmed on Form SM-6.	
Slope stability analysis required? If yes, see "Additional Information Requirements for Mines with Potentially Unstable or Steep Slopes." This document is included in the SM8AINST.PDF file. Slope stability analysis provided by _____	<input type="checkbox"/> yes <input type="checkbox"/> no
Measures will be taken to limit access to the top and bottom of hazardous slopes?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

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Describe measures, or if no, explain: **Fences will be used above and adjacent to the top of steel slopes. Signage will be used posted on fences indicating steep slope area.**

Selective blasting will be used to remove benches and walls and to create chutes, buttresses, spurs, scree slopes, and rough cliff faces that appear natural?

☒ yes ☐ no

Describe procedures, or if no, explain: **Blasting will be used as necessary to blend the slope to a natural appearance. Cliffs and benches will be used to enhance revegetation of the site. The benches will help hold moisture and topsoil from eroding from the site. Talus slopes (chutes) will be created at 2:1 to allow migration pathways for wildlife in areas of the site.**

Reclamation blasting will be used to reduce the entire highwall to a scree or rubble slope less than 2 feet horizontal to 1 foot vertical?

☒ yes ☐ no

Blasting plan is attached?

☐ yes ☒ no

If no, explain:

Access to benches will be maintained for reclamation blasting?

☒ yes ☐ no

If no, explain:

Small portions of benches will be left to provide habitat for raptors and other cliff-dwelling birds?

☒ yes ☐ no

25D. Backfilling

Slopes will require backfilling?

☐ yes ☒ no

Depth of backfilling is _____ feet.

Slope stability compaction analysis required?

☐ yes ☒ no

Compaction analysis provided by _____

Backfilling plan and (or) permits are attached?

☐ yes ☒ no

If no, explain: **No backfilling will be conducted therefore backfilling plan not required**

Backfilling will be done with overburden material after topsoil has been separated?

☐ yes ☒ no

If no, describe composition and source of backfill material: **No backfilling will be conducted, therefore backfilling plan not required.**

Explain method of placement of fill:

Locations of stockpiles are shown on maps and will be marked on the ground with permanent boundary markers?

☐ yes ☒ no

Will backfill be imported?

☐ yes ☒ no

If yes, give volumes needed to meet reclamation plan:

Areas to be backfilled are shown on maps?

☐ yes ☒ no

If no, explain: **Backfilling will not be completed for the project**

All grading/backfilling will be done with clean, inert, non-organic solids?

☒ yes ☐ no

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If yes, give details. If no, explain: **Grading will be done if required with clean, inert, non organic solids.**

Backfilled slopes will be compacted?

If yes, give details. If no, explain: **No backfilling will be done, therefore compaction will not be required.**

☐ yes ☒ no

Will you be backfilling into water?

If yes, is slope stability analysis attached?

If yes, describe method:

☐ yes ☒ no
☐ yes ☒ no

25E. Mine Floors

Flat areas will be formed into gently rolling mounds?

If yes, give details. If no, Explain: **Upon final mining loose material on the mine floor will be formed into gently rolling mounds using heavy earth moving equipment.**

☒ yes ☐ no

Mine floor will be gently graded into sinuous drainage channels to preclude sheetwash erosion during intense precipitation?

If yes, give details. If no, explain: **A meandering pattern will be used for the mounds on the mine floor to prevent sheet wash and to direct water toward revegetated areas.**

☒ yes ☐ no

Mine floor and other compacted areas will be bulldozed, plowed, ripped, or blasted to foster revegetation?

If yes, give details. If no, explain: **The mine floor will be bulldozed to create a more porous floor surface before shaiping of the mounds**

☒ yes ☐ no

25F. Lakes, Ponds, and Wetlands

Is water currently present in the area or will the mining penetrate the water table?

If no, go to Section 25G.

☐ yes ☒ no

Reclaimed areas below the permanent low water table in soil, sand, gravel, and other unconsolidated material will have a slope no steeper than 1.5 feet horizontal to 1 foot vertical?

If yes, give details. If no, explain:

☐ yes ☒ no

If not already present, soils, silts, and clay-bearing material will be placed below water level to enhance revegetation?

If yes, give details. If no, explain:

☐ yes ☐ no

Some parts of pond and lake banks will be shaped so that a person can escape from the water?

If yes, give details. If no, explain:

☐ yes ☐ no

Armored spillways or other measures to prevent undesirable overflow or seepage will be provided to stabilize bodies of water and adjacent slopes?

If yes, give details. If no, explain:

☐ yes ☐ no

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<p>Wildlife habitat will be developed, incorporating such measures as:</p> <p style="margin-left: 20px;">Sinuous and irregular shorelines?</p> <p style="margin-left: 20px;">Varied water depths?</p> <p style="margin-left: 20px;">Shallow areas less than 18 inches deep?</p> <p style="margin-left: 20px;">Islands and peninsulas?</p> <p>Give details:</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no
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<input type="checkbox"/> yes	<input type="checkbox"/> no								
<p>Ponds or basins will:</p> <p style="margin-left: 20px;">Be located in stable areas?</p> <p style="margin-left: 20px;">Have sufficient volume for expected runoff?</p> <p style="margin-left: 20px;">Have an emergency overflow spillway?</p> <p style="margin-left: 20px;">Spillways and outfalls will be protected (for example, rock armor) to prevent failure and erosion?</p> <p>If any answers are no, explain:</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<p>Proper measures will be taken to prevent seepage from water impoundments that could cause flooding outside the permitted area or adversely affect the stability of impoundment dams or adjacent slopes?</p> <p>If yes, give details. If no, explain:</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input type="checkbox"/> no						
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<p>Written approval from other agencies with jurisdiction to regulate impoundment of water is attached?</p> <p>If no, explain:</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input type="checkbox"/> no						
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<p>25G. FINAL DRAINAGE CONFIGURATION</p>									
<p>Drainage will be capable of carrying the peak flow of the 25-year, 24-hour precipitation event (<i>Data are available at DNR Region offices</i>)</p> <p>If yes, are calculations attached?</p> <p>If yes, give details. If no, explain:</p>	<table style="width: 100%; border: none;"> <tr> <td><input checked="" type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input checked="" type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> </table>	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no				
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no								
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no								
<p>Drainages will be constructed on each reclaimed segment to control surface water, erosion, and siltation?</p> <p>Clean runoff is directed to a safe outlet?</p> <p>If either yes, give details. If no, explain: Runoff will be retained on site. Ripping and blasting will create permeability in the slope and mine floor. This will allow infiltration of 25 year 24 hour precipitation event flow.</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input checked="" type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input checked="" type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no				
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no								
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no								
<p>Are these shown on maps?</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input checked="" type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no						
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no								
<p>The grade of ditches and channels will be constructed to limit erosion and siltation?</p> <p>If yes, give details. If no, explain: Not applicable</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input checked="" type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no						
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no								
<p>Natural-appearing drainage channels will be established upon reclamation?</p> <p>If yes, give details. If no, explain: Not applicable</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> yes</td> <td><input checked="" type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no						
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no								

CHECKLIST OF RECLAMATION STANDARDS

26. SITE CLEANUP AND PREPARATION FOR REVEGETATION

26A. Dealing with Hazardous Materials

Hazardous materials are present at the mine site?

☐ yes ☒ no

If no, go to Section 25B

The final ground surface drains away from any hazardous natural materials?

☐ yes ☐ no

If yes, give details. If no, explain:

Plan for handling hazardous mineral wastes indigenous to the site is attached?

☐ yes ☐ no

If no, written approval from all appropriate solid waste regulatory agencies attached?

☐ yes ☐ no

26B. Removal of Debris

All debris (garbage, 'bone piles', treated wood, old mining equipment, etc.) will be removed from the mine site?

☒ yes ☐ no

All sheds, scale houses, and other structures will be removed from the site?

☒ yes ☐ no

If either answer is yes, give details. If no, explain: **Structures are not planned for the site. All debris if generated will be removed from the site.**

27. REVEGETATION

The mine site is in:

☒ eastern Washington

☐ western Washington

The mine site is:

☐ wet

☒ dry?

The average precipitation is 44 per year.

Revegetation will start during the first proper growing season (fall for grasses and legumes, fall or late winter for trees and shrubs) following restoration of slopes?

☒ yes ☐ no

If yes, give details. If no, explain: **A revegetation plan is attached in the appendix**

Test plots will be used to determine optimum vegetation plans?

☐ yes ☒ no

The site will not be revegetated because:

☐ It is a rural area with a rainfall exceeding 30 inches annually and erosion will not be a problem (requires approval of DNR).

☐ Demonstration plots and areas will be used to show that active revegetation is not necessary.

☐ Revegetation is inappropriate for the approved subsequent use of this surface mine.

Explain:

Documentation is attached?

☐ yes ☒ no

27A. Recommended Pioneer Species

In the Sections below, check the species that will be planted at your mine site:

** indicates nitrogen-fixing species*

Western Washington Dry Areas

☐ alfalfa*

☐ Lupine*

☐ clover*

☐ orchard grass

☐ cereal rye

☐ perennial rye

☐ colonial bent grass

☐ ponderosa pine

☐ creeping red fescue

☐ red alder*

☐ Douglas fir

☐ shore pine

☐ ground cover

☐ shrubs

☐ other

CHECKLIST OF RECLAMATION STANDARDS

Western Washington Wet Areas <input type="checkbox"/> birdsfoot trefoil <input type="checkbox"/> sedges <input type="checkbox"/> cedar <input type="checkbox"/> tubers <input type="checkbox"/> cottonwood <input type="checkbox"/> wetland grasses <input type="checkbox"/> creeping red fescue <input type="checkbox"/> willow <input type="checkbox"/> red alder* <input type="checkbox"/> other															
Eastern Washington Dry Areas <input checked="" type="checkbox"/> alder* <input checked="" type="checkbox"/> grasses <input type="checkbox"/> alfalfa* <input type="checkbox"/> juniper <input type="checkbox"/> black locust <input type="checkbox"/> lodgepole pine <input type="checkbox"/> clover <input type="checkbox"/> lupine* <input type="checkbox"/> deciduous trees <input checked="" type="checkbox"/> ponderosa pine <input type="checkbox"/> shrubs <input type="checkbox"/> deep-rooted ground cover <input checked="" type="checkbox"/> diverse evergreens <input type="checkbox"/> other															
Eastern Washington Wet Areas <input type="checkbox"/> alder* <input type="checkbox"/> cottonwood <input type="checkbox"/> poplar <input type="checkbox"/> sedges <input type="checkbox"/> serviceberry <input type="checkbox"/> tubers <input type="checkbox"/> willow <input type="checkbox"/> other															
Give planting details (stems/acres of trees and shrubs, see Forest Practices manual; lbs/acre of grass, legume, or forb mixture): Blasting and ripping will help create fracture seams to aid re-growth. Trees - 190 vigorous, undamaged seedlings per acre. Grass - The appropriate seed and fertilizer mixtures and quantities will be determined by the soil conservation service at a time closer to the start of reclamation. Describe weed control plan:															
27B. Planting Techniques															
Revegetation at this site will require: Ripping and tilling? Blasting to create permeability? Mulching? Irrigation? Fertilization? Importation of clay- or humus-bearing soils? Other soil conditioners or amendments? Give details: Due to the geologic setting some reclamation blasting may be used to create permeability and ripping of the mine floor.	<table style="width: 100%;"> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> <tr><td><input type="checkbox"/> yes</td><td><input checked="" type="checkbox"/> no</td></tr> <tr><td><input type="checkbox"/> yes</td><td><input checked="" type="checkbox"/> no</td></tr> <tr><td><input type="checkbox"/> yes</td><td><input checked="" type="checkbox"/> no</td></tr> <tr><td><input type="checkbox"/> yes</td><td><input checked="" type="checkbox"/> no</td></tr> <tr><td><input type="checkbox"/> yes</td><td><input checked="" type="checkbox"/> no</td></tr> </table>	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
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<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no														
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no														
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no														
Trees and shrubs will be planted in topsoil or in subsoil amended with generous amounts of organic matter? If yes, give details. If no, explain: Planting areas will be prepared in accordance with the instruction provided by the supplier.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no														
Mulch will be piled around the base of trees and shrubs? High quality stock will be used? Trees and shrubs will be planted while they are dormant? Stock will be properly handled, kept cool and moist, and planted as soon as possible? Seeds will be covered with topsoil or mulch no deeper than one-half inch? If any answers are no, explain:	<table style="width: 100%;"> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> <tr><td><input checked="" type="checkbox"/> yes</td><td><input type="checkbox"/> no</td></tr> </table>	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no				
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no														
All required maps are attached (See Instructions for detailed requirements)?															
All required cross-sections are attached (See Instructions for detailed requirements)?															
Geologic map attached (if required)?															

CHECKLIST OF RECLAMATION STANDARDS

All documents submitted have the date, the name and address of the permit holder, and the application number on every page of the material?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
The plan contains predominantly relevant information?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Have you completed the SM-6 and has it been signed by the local jurisdiction?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Have you provided the SEPA checklist?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Have you provided a copy of the SEPA Determination (DNS, MDNS, or DS)?	<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
Have you attached photographs?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Are additional supplemental studies included?	<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
If yes, check the appropriate box(es) below: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Archeological</div> <div style="width: 50%;"><input type="checkbox"/> Geohydrologic</div> <div style="width: 50%;"><input type="checkbox"/> Backfill</div> <div style="width: 50%;"><input type="checkbox"/> Slope stability</div> <div style="width: 50%;"><input type="checkbox"/> Topsoil</div> <div style="width: 50%;"><input type="checkbox"/> Flood plain</div> <div style="width: 50%;"><input type="checkbox"/> Conservational</div> <div style="width: 50%;"><input type="checkbox"/> Vegetation</div> <div style="width: 50%;"><input type="checkbox"/> Other</div> </div>				
Other permits required?	<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
If yes, check the appropriate box(es) below: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Shoreline permit</div> <div style="width: 50%;"><input type="checkbox"/> Water Discharge Permit</div> <div style="width: 50%;"><input type="checkbox"/> Solid Waste Permit</div> <div style="width: 50%;"><input type="checkbox"/> Air Quality Permit</div> <div style="width: 50%;"><input type="checkbox"/> NPDS or General Discharge Permit</div> <div style="width: 50%;"><input type="checkbox"/> Hydraulic Project Approval</div> <div style="width: 50%;"><input type="checkbox"/> Special or Conditional Use Permit</div> <div style="width: 50%;"><input type="checkbox"/> Other</div> </div>				

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CHECKLIST OF RECLAMATION STANDARDS

When signed by the applicant and approved by the Department of Natural Resources, this document and the associated maps, cross sections, reclamation narrative, and other attachments will be the approved reclamation plan for this permit that the permit holder must follow. Significant variations from the approved reclamation plan may require that a new plan be submitted to the Department for approval.

The applicant shall be considered as the permit holder for this surface mine and shall be responsible for compliance with Chapter 78.44 RCW, Chapter 332-18 WAC, the approved reclamation plan and attachments, and the conditions of the permit if issued by the Department of Natural Resources.			
I hereby agree to comply with this plan. <i>Signature of applicant or company representative</i> 	Name and Title of Company Representative (Please print) JOHN C. Bryant President	Date signed 6 MAR 06	
SURFACE OWNERSHIP (For New Permits Only) Give names, addresses, and signatures of all individuals with possessory interest in land. (attach signed copies of this page if more than one) I verify that the applicant has my permission to mine from my land. <i>Signature of landowner(s)</i> _____ <i>Date Signed</i> 6 MAR 06 I hereby verify that I have seen and approved this plan. <i>Signature of landowner(s)</i> _____ <i>Date Signed</i> 6 MAR 06		OWNERSHIP OF RIGHTS TO REMOVE MINERALS BY SURFACE MINING (For New Permits Only) Give names, addresses, and signatures of all individuals with rights. (attach signed copies of this page if more than one) I verify that the applicant has my permission to mine this land. <i>Signature of rights owner(s)</i> _____ <i>Date Signed</i> 6 MAR 06 I hereby verify that I have seen and approved this plan. <i>Signature of rights owner(s)</i> _____ <i>Date Signed</i> 6 MAR 06	
FOR DEPARTMENTAL USE ONLY			
Date accepted	Accepted by: _____	Title: _____	Reclamation Permit No. _____
Comments by Department:			


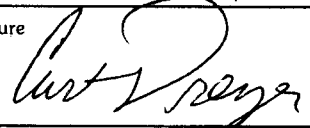
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WASHINGTON STATE DEPARTMENT OF
Natural Resources

**COUNTY OR MUNICIPALITY
APPROVAL FOR
SURFACE MINING
(Form SM-6)**

NAME OF COMPANY OR INDIVIDUAL APPLICANT(S) Same as name of the exploration permit holder. (Type or print in ink.) J. Arlie Bryant Inc.		TOTAL ACREAGE AND DEPTH OF PERMIT AREA (Include all acreage to be disturbed by mining, setbacks, and buffers, and associated activities during the life of the mine.) (See SM-8A.) Total area disturbed will be <u>20</u> acres Maximum vertical depth below pre-mining topographic grade is <u>240</u> feet Maximum depth of excavated mine floor is <u>1900</u> feet relative to mean sea level								
MAILING ADDRESS 2000 W 6th Street The Dalles, OR 97058 Telephone 541 296 2129		COUNTY <u>Klickitat</u> No attachments will be accepted. Legal description of permit area:								
		1/4	1/4	Section	Township	Range				
		NE	SW	29	06 N	11 E				
		SE	NW	29	06 N	11 E				
Proposed subsequent use of site upon completion of reclamation Forestry										
Signature of company representative or individual applicant(s) 		Name and title of company representative (please print) John C. "Jack" Bryant President		Date signed 13 July 06						
TO BE COMPLETED BY THE APPROPRIATE COUNTY OR MUNICIPALITY:										
Please answer the following questions 'yes' or 'no'. 1. Has the proposed surface mine been approved under local zoning and land-use regulations? 2. Is the proposed subsequent use of the land after reclamation consistent with the local land-use plan/designation? When complete, return this form to the appropriate Department of Natural Resources regional office.				<table border="1"><tr><td>Yes</td><td>No</td></tr><tr><td>✓</td><td></td></tr><tr><td>✓</td><td></td></tr></table>	Yes	No	✓		✓	
Yes	No									
✓										
✓										
Name of planning director or administrative official (please print) Curt Dreyer		Address 228 West Main St. Room 150 Goldendale, WA 98620 RECEIVED JUL 17 2006 Geology and Earth								
Signature 										
Title (please print) Klickitat County Planning Director										
Telephone 509-773-5703		Date 7/13/06		DNR Reclamation Permit No. 70-010778						

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PROPOSED MINING SEQUENCE/BACKFILLING PLAN

Two mine sequences have been developed for the Fisher Quarry site. The existing topsoil from mining sequences I has been stripped and stockpiled at the for future reclamation purposes. Bedrock will be mined using a combination of blasting and ripping.

The mining process will create a series of benches that will be used to remove resource material. Reclamation blasting of the highwall of the bench will be used to reduce the highwalls and create more natural slopes. The pre-existing topography was steep and will be consistent with the post reclamation topography. The blasting will also be useful in creating non-linear surfaces. Scree slopes and chutes and spurs will be created. The outside half of the reclamation setback will not be mined so blasting can be performed to create a final slope near 2:1.

Final mining will be from sequence 2. This area will be mined in a similar manner to sequence 1. Reclamation will begin for sequence 1 upon opening area 2. Revegetation activities will include creating permeability in the slope and mine floor by ripping or blasting. Topsoil will be replaced and the area reseeded with grasses (rye, fescue, and blue grass seed mixture), ponderosa pine and evergreens..

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Date: 2 MAR 06

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The Dalles, OR, 97058

Reclamation Permit/Application No. 70-010778

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RECLAMATION SCHEDULE

The anticipated reclamation schedule is dependent on the demand for processed rock products in the Trout Lake Valley. The anticipated mine life is approximately 30 years. The site has been divided into two sequences.

Reclamation should begin in sequence 1 in approximately 10 to 15 years from the date of submission of this report. If resource demand increases or the quality of the rock decreases as the quarry is expanded, reclamation may begin earlier. Reclamation which includes developing final slopes by ripping and blasting would be completed coincident with opening sequence 2. Revegetation will occur the first appropriate season (spring or fall) following mining activities and the creation of final topography. Some mulching may occur to supplement the topsoil. Irrigation will not be used and fertilization will only be completed with the initial application of the grass seed.

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Date: 2 MAR 06

J. Arlie Bryant, Inc.

200 W 6th Street

The Dalles, OR, 97058

Reclamation Permit/Application No. 70-010778

TOPSOIL SALVAGE AND REPLACEMENT PLAN

Vegetation will be cleared from the site with stripping equipment. Topsoil will then be removed using excavation equipment. Subsoil will be removed and stockpiled separately. The topsoil and subsoil will be stockpiled in the southeast corner of the site until sequences are ready for reclamation.

The topsoil will be spread with dumping equipment and spread with a small dozer. Topsoil will be replaced in a similar thickness to that removed at the site but in localized areas because of the lack of pre-existing material. Track marks oriented perpendicular to the slope will be left on the topsoil surface to help retain seeds and prevent erosion. Thicker layers of topsoil may be placed selectively in depressions to create stable growing environments to quickly start revegetation growth.

Date: 2 MAR 06
J. Arlie Bryant, Inc.
200 W 6th Street
The Dalles, OR, 97058

Reclamation Permit/Application No. 70-010778

25 year/24 hour Peak Precip. Event

Event Rainfall from NOAA Atlas 2 = 4.2 inches

Drainage Area = ~ 40 acres = 1,742,400

Slope = $\frac{\text{rise}}{\text{Length}} = \frac{560\text{ft}}{2120\text{ft}} = 26\%$

Q = CIA (mined) = CIA (forested)

Q = discharge (total)

I = intensity = 4.2 inches

A = area = (forested) 1,306,800 = (mined) 435,600

C = runoff coefficients = (forested) 0.35 = (mined) 0.90

$Q = (0.90 \cdot 435,600 \cdot 4.2/12) + (0.35 \cdot 1,306,800 \cdot 4.2/12)$

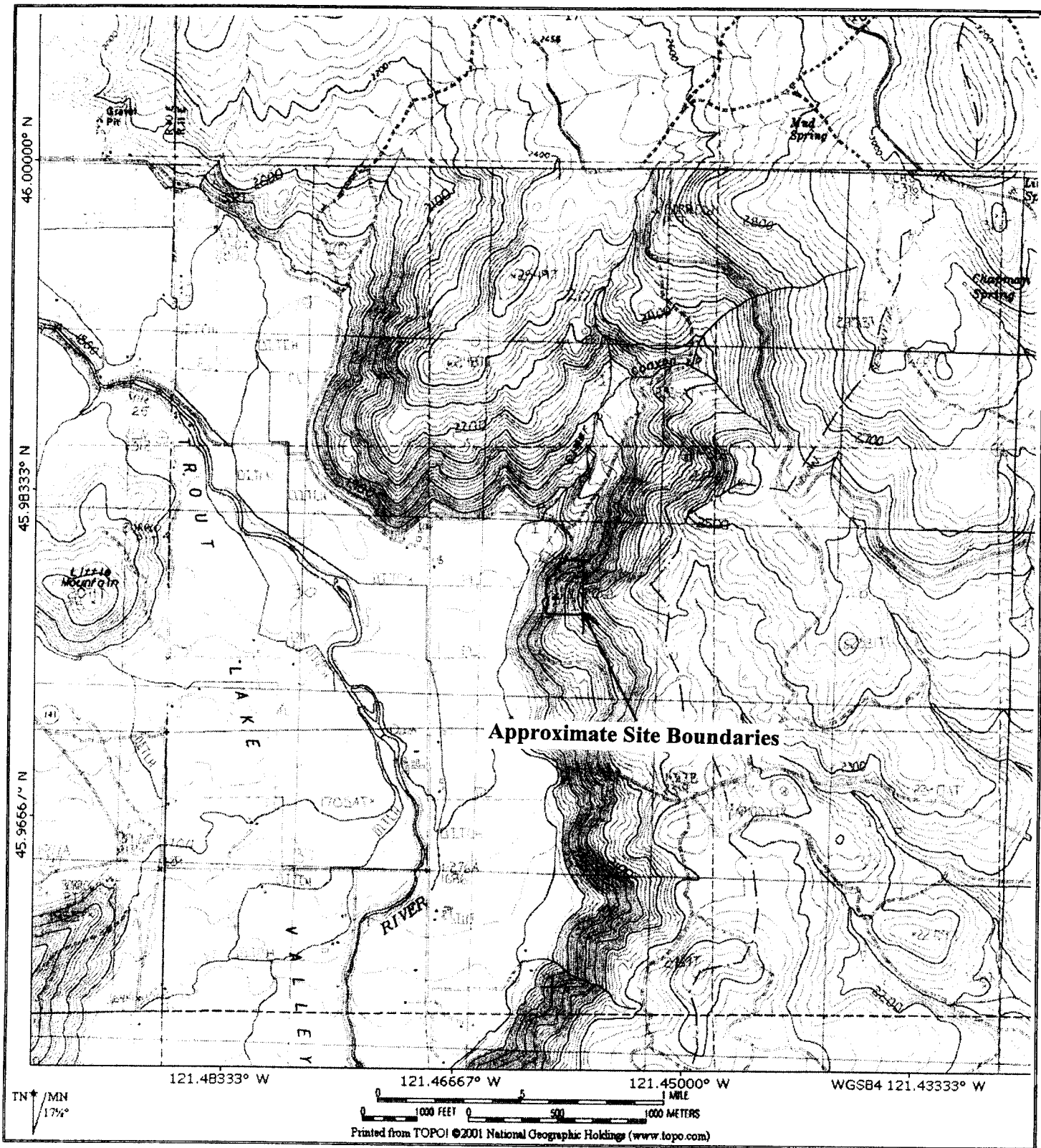
Q = 297,297ft³ maintain on-site

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Date: 2 Mar 06
J. Arlie Bryant, Inc.
2000 W 6th St
The Dallas, OR 97058



Reclamation Permit RECEIVED
Application No. 70-010778

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Site Location Map RECEIVED

Fisher Quarry
J. Arlie Bryant, Inc. **MAR 06 2006**
2000 W 6th Street
The Dalles, OR 97058

Date
01-04

Mounted By:
GH

Reviewed By:
GH

Figure
1

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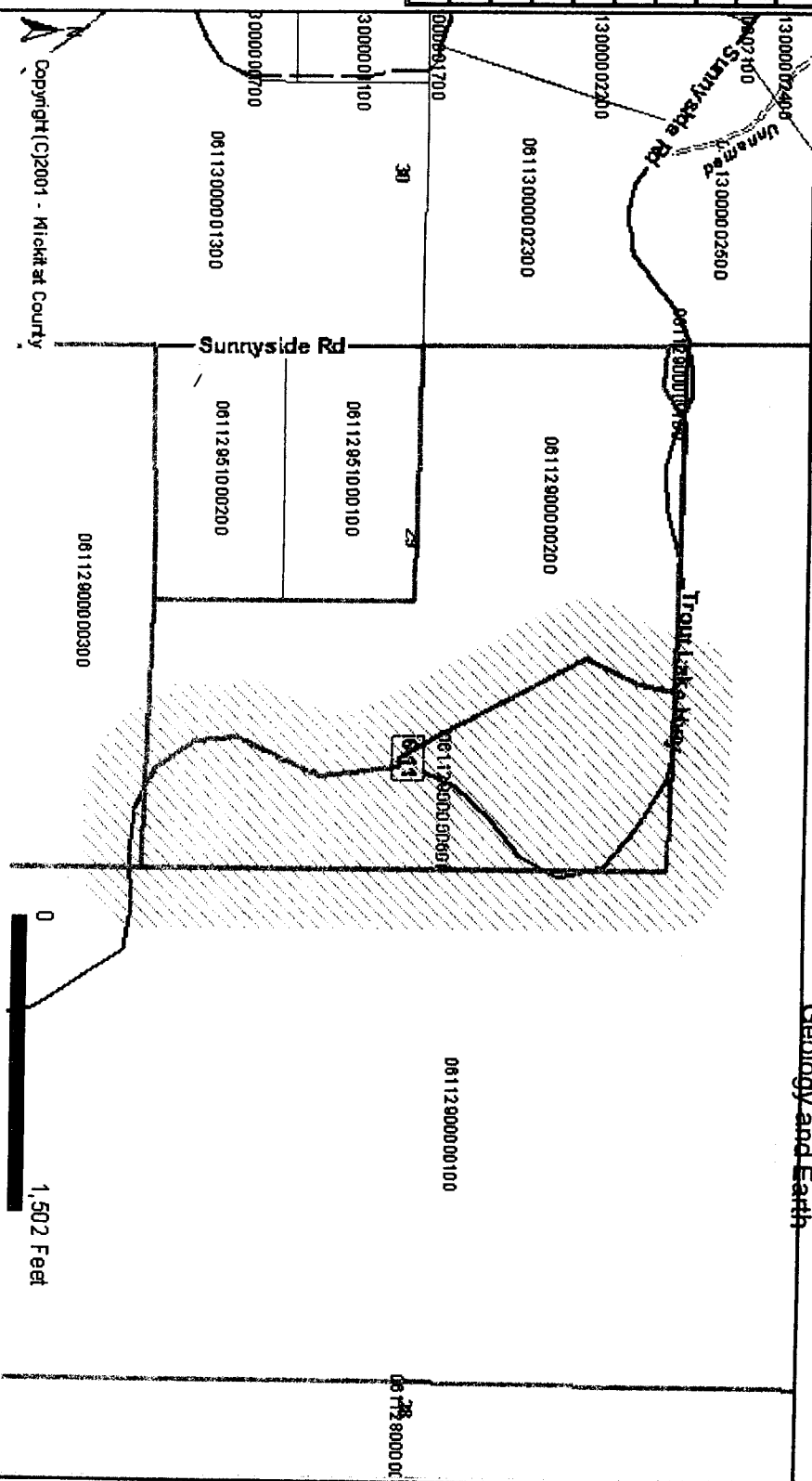


Klickitat County Public Works

JUL 17 2006

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Refresh Map



Adjacent Landowners names and addresses:

P-numbers									
Zoom_To	PARCEL_NUM	LEGAL	NAME	ADDRESS	SURVEY1	SURVEY2	SURVEY3	AUDITOR_NO	COMMENT
				1499 SE TECH CENTER PL					
				730 TEXAS					

Layers

ON ACTIVE

- ☒ Roads
- ☒ Hydrology
- ☒ Sections
- ☒ P-numbers
- ☒ Parcels
- ☒ Twp_Rge
- ☒ City Limits
- ☒ towns
- ☒ Transmission
- ☒ Pipeline
- ☒ Railroad
- ☒ Zoning
- ☒ comm_dist
- ☒ cemetery
- ☒ dog_ord
- ☒ firelist
- ☒ herd_law
- ☒ school_dist
- ☒ precincts
- ☒ rec_dist
- ☒ 2003 County Photo (20:1)
- ☒ Bingen Photo
- ☒ Dallspt Photo
- ☒ Goldendale Photo
- ☒ Glenwood Photo

Buffer

This map is for planning purposes only. Parcels are a graphical representation, use surveys & deeds of record for accurate data. Right of way is preliminary, refer to appropriate agency for status. Survey references may not be a complete list, check individual surveys for other documents. Verify district boundaries with description.

P-numbers

Zoom_To	PARCEL_NUM	LEGAL	NAME	ADDRESS	SURVEY1	SURVEY2	SURVEY3	AUDITOR_NO	COMMENT	ACRES	LAND	IMPRV	TOTAL_AV	TAXCODE	USECODE
1	06112900000100	E2: N2NW 29-6-11	730 TEXAS TIMBERLANDS II LTD	1499 SE TECH CENTER PL STE 250 VANCOUVER Washington 98683						400.00	0	0	23880	17	88
2	06112900000600	TAX LOT 3 IN S2NW; TAX LOT 4 IN E2NW & NESW; TAX LOT 5 IN S2NW; 29-6-11	ARLIE J BRYANT INC	2000 W 6TH THE DALLES Oregon 97058	231128					38.80	0	0	2580	18	88
3	06112900000200	S2NW4 LESS TLS 2,3 & 5: NESW4 LESS TL 4; 29-6- 11	POLAND, VICTOR	410 SUNNYSIDE RD TROUT LAKE Washington 98650	231128					74.76	169960	291700	307470	18	83
4	06112900000300	S2SW4 LESS TAX LOT 1; 29-6-11	BALL, LON	149 LITTLE MOUNTAIN RD TROUT LAKE Washington 98650						80.00	196000	11700	27490	18	83

Adjacent landowners names and addresses:

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